

### **Have the affected neighborhoods had an unusually high number of people diagnosed with cancer?**

The state of Oregon collects and analyzes information about cancer cases. OHA reviewed data from this state cancer registry for the areas of Southeast Portland with reported elevated levels of cadmium and arsenic. Initial results show no evidence of an increase in cancers associated with cadmium and arsenic exposure. Those results were reported Feb. 18 in a cancer incidence evaluation published on the Oregon Health Authority's [website healthoregon.org/metalsemissions](http://healthoregon.org/metalsemissions) (see "[Oregon cancer incidence evaluation](#)"). OHA is conducting a similar review for North Portland and will publish those results in March.

### **What can the Forest Service moss maps tell me about health risks?**

Many people are concerned about hot spots based on maps that The Oregonian created from U.S. Forest Service data. But with the exception of cadmium, there is no way to use those maps to predict or estimate health risks to people. The moss maps for metals other than cadmium only show where in the city moss has higher concentrations of metals relative to moss in other parts of the city.

In the case of cadmium only, the Forest Service was able to find a mathematical correlation between moss concentrations and air concentrations that existed in October 2015. The Forest Service has not been able to find a correlation between moss concentrations and air concentrations for any other metals for any period of time. This means that moss maps for metals other than cadmium cannot be used to predict air or soil concentrations in those areas. Because health risk is based on exposure by breathing contaminated air and not eating moss, the moss maps cannot be used to predict health risks.

OHA, DEQ and Multnomah County are working on a fair and transparent system for prioritizing areas identified based on metals concentrations in moss for additional environmental testing and follow-up. Currently, resources are focused on the area surrounding Bullseye and Uroboros glass companies.

### **When will we be able to identify the "hot spots" for residents for whom you promised to cover the cost of urine cadmium testing?**

DEQ is testing air and soil samples to find other "hot spots" around the city. The agency will work with the Oregon Health Authority to determine possible health risks for people living in those areas. OHA will use that information to alert community members about their risks, whether they should get urine testing and how to do that. More information on the testing is included below.

### **Local and state health officers advised people living within a half mile of the glass factories not to eat backyard produce until further notice. When will these residents be able to eat produce from their gardens?**

On Feb. 12, 2016, Bullseye Glass Company stopped using cadmium, arsenic and chromium. Uroboros Glass agreed to stop using all chromium and cadmium, and does not use arsenic. DEQ is gathering additional air and soil sampling data to ensure that there is no additional risk of exposure to levels that might affect your health. That data is expected to be released the week of March 7. If sampling demonstrates exposure risk has ended, DEQ and OHA will advise the public and make recommendations that may

include steps for properly cleaning produce, or destroying it. For more information, see the OHA guide for healthy gardening:

[http://public.health.oregon.gov/HealthyEnvironments/HealthyNeighborhoods/Documents/OHA\\_Healthy\\_Gardening\\_10\\_2013.pdf](http://public.health.oregon.gov/HealthyEnvironments/HealthyNeighborhoods/Documents/OHA_Healthy_Gardening_10_2013.pdf)

**Should I have my soil tested?**

OHA is not recommending soil testing at this time. If you choose to have your soil tested, the agency has produced an information sheet with a list of soil testing companies. It is available at <http://public.health.oregon.gov/newsadvisories/Documents/soil-labs.pdf>. The Portland area has naturally occurring background levels of many metals, including arsenic, due partly to past volcanic activity. It's important to consider that a test showing a positive result for presence of metals does not necessarily mean the levels are abnormally high for the region, or that they pose a risk to your health. DEQ is developing guidance on how to interpret soil testing results.

**I understand the agency is offering to pay for people to get their urine tested for cadmium. How many people have taken the agency up on that offer?**

OHA is working on a funding plan to cover the cost of urine cadmium testing for residents of the affected areas whose insurance will not pay for the tests. Patients should discuss the need for testing, and the potential benefits and limitations of testing with their physicians. Most private insurance will cover the cost of cadmium testing for people living near the glass companies. OHA is working with the Oregon Health Plan to extend the same benefit to its members.

**Do you have any urine test results so far? What are the results? What are you doing with the results of these tests?**

OHA does not yet have urine test results. On Feb. 18, OHA began requiring all health care providers and laboratories to report all positive urine tests for cadmium in Oregon. This will allow the state to gather information, as it does with other conditions. Local public health officials will then follow up on the positive test reports. They will collect information from patients on such things as how long the person has lived in that area, their occupation, their work place, what schools they attend, and other information that can help identify potential sources of cadmium exposure. Once OHA looks at the test results over the next few months, it will decide whether or not to recommend testing. Individual test results reported to OHA for public health purposes are confidential under Oregon law. However, OHA can report summary data to the public.

**Does the emergency rule make it mandatory for physicians to report the results of these cadmium tests?**

Yes, and OHA is working with laboratories to make it possible to have fast, electronic reporting of the results to public health officials.

**I have results from an independent laboratory that performed soil and air monitoring. Would state and local agencies investigating metals emissions in Southeast and North Portland be interested in them?**

There are many parties independently collecting environmental data. These include Portland State University, Portland Public Schools, daycares, media outlets, and individuals who are having soil and urine tested. Several of these are analyzing the data they collect, or distributing the results widely. This has created opportunities for a range of people to weigh in on what this initial data may mean. All this information can potentially help us understand the public health risks, but it is not without limitations. But the collection must be done in a way that meets the state's standards so we are not comparing apples to oranges.

The OHA, DEQ and MCHD are fully committed to providing the public with accurate information to address the broad range of concerns we have heard. In response to community concern, we are speeding up our regular assessment process in order to provide this scientific information as quickly as possible. We will fully consider all data provided to us to determine its validity and whether it enhances our understanding of the public health risk associated with exposure to these metals in our environment. Our top priority is to protect the health of people who have been, and may be, exposed to the emissions from the glass companies.

**Now that the results are reportable, what does that allow you to learn?**

The urine test for cadmium can help estimate cadmium exposure that has occurred over the past several years. Arsenic and chromium, on the other hand, leave the body quickly, so a urine test for these two metals only reflects recent exposure (days to at most a week or so). Unfortunately, these tests only show exposure not specific health effects. Elevated levels of metals in children under age 6 can hard to understand and should be interpreted carefully with an expert.

Experts at the federal Centers for Disease Control and Prevention do not recommend testing of hair or nails because of frequent contamination with dirt and dust.

**What are you advising parents and teachers about whether children should use the playground in areas with high levels of air toxics?**

We are eagerly awaiting up-to-date results on air monitoring in the areas near the glass factories. Since they have both stopped using the chemicals detected at high levels in October 2015, we are optimistic that levels will no longer be high. The week of March 7th we will also have up to date information on the soil at nearby parks and schools that will provide information about safety. Since the testing done at the childcare center very close to Bullseye glass showed normal Portland area levels of metals in the soil, we hope that the same will be true for other nearby public areas.

**What steps should students follow when they return to the school classroom after playing outside?**

Regardless of neighborhood, kids should wash their hands after returning inside after playing, before eating, and any other time that their hands are visibly dirty.

**Is the produce from school gardens safe to eat?**

We soon will have the first set of information from soil testing and can then provide advice on school gardens. Out of an abundance of caution during this situation, we recommend holding off until more information is available.

**Should schools test the dust in the schools for cadmium and arsenic?**

Additional indoor testing will not be necessary unless outdoor tests identify metals at abnormal levels.